CULTURAL RESOURCES SURVEY OF THE EUTAWVILLE 115kV TRANSMISSION PROJECT, ORANGEBURG COUNTY, SOUTH CAROLINA

CHICORA RESEARCH CONTRIBUTION 538

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ABSTRACT

This study reports on an intensive cultural resources survey of an approximately 5.1 mile corridor and substation in the eastern portion of Orangeburg County, South Carolina. The work was conducted to assist Central Electric Power Cooperative in complying with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

The corridor is to be used by Central Electric Power Cooperative for the construction of a transmission line. The transmission line will connect to an existing line at the western end and run east, terminating at the proposed substation lot. The topography is generally level with elevations in the eastern portion of the corridor slightly higher than in the west.

The proposed route will require the clearing of the corridor, followed by construction of the proposed transmission line and substation. These activities have the potential to affect archaeological and historical sites that may be in the project corridor. For this study an area of potential effect (APE) 0.5 mile around the proposed transmission line was assumed.

ArchSite was consulted to see if any previously identified archaeological or architectural resources were within 0.5 mile of the corridor. No sites were found.

Although no comprehensive architectural survey has been completed for Orangeburg County, the SHPO has had various small-scale surveys that were completed between 1973 and 1985. The hardcopy files for these surveys were also examined with one resource found in the APE. The site is recorded as County #6, Vance Quad and is a c. 1920 house. No eligibility information was recorded for the structure.

The archaeological survey of the corridor incorporated shovel testing at 100-foot intervals along the center line of the 75-foot right-of-way, which was marked by stakes. All shovel test fill was screened through ¼-inch mesh with a total of 275 shovel tests excavated along the corridor, 14 tests performed in the proposed substation lot, and additional testing at the three identified sites.

As a result of these investigations three sites (38OR321-323) were identified. All three sites are nineteenth to twentieth century scatters that are recommended not eligible for the National Register of Historic Places.

A survey of public roads within a 0.5 mile of the proposed undertaking was conducted in an effort to identify any architectural sites over 50 years old which also retained their integrity. The previously identified architectural site was revisited and assigned an updated site number (0250). One additional structure (0251 – a c. 1840 house) was recorded during this survey. Both structures are potentially eligible for the National Register of Historic Places. While the structures can be seen from the project corridor, the transmission line should be mostly shielded from view.

Finally, it is possible that archaeological remains may be encountered in the project area during clearing activities. Crews should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office or to Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No construction should take place in the vicinity of these late discoveries until they have been examined by an archaeologist and,

if necessary, have been processed according to 36CFR800.13(b)(3).

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INTRODUCTION

This investigation was conducted by Dr. Michael Trinkley of Chicora Foundation, Inc. for Mr. Tommy L. Jackson of Central Electric Power Cooperative. The work was conducted to assist Central Electric Power Cooperative comply with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

The project consists of a 5.1 mile corridor and lot to be used for a 115kV transmission line and substation in eastern Orangeburg County (Figure 1). The project runs approximately west-east between an existing transmission line at the western end and the proposed substation at SC 6 on the eastern end.

The proposed corridor, as previously mentioned, is intended to be used as a transmission line. Landscape alteration, primarily clearing, and construction, including erection of poles, will damage the ground surface and any archaeological resources that may be present in the survey area.

Construction and maintenance of the transmission line and substation may also have an impact on historic resources in the project area. The project will not directly affect any historic structures (since none are located on the survey corridor), but the completed facility may detract from the visual integrity of historic properties, creating what many consider discordant surroundings. As a result, this architectural survey uses an area of potential effect (APE) about 0.5 mile radius around the proposed survey corridor.

This study, however, does not consider any future secondary impact of the project, including increased or expanded development of

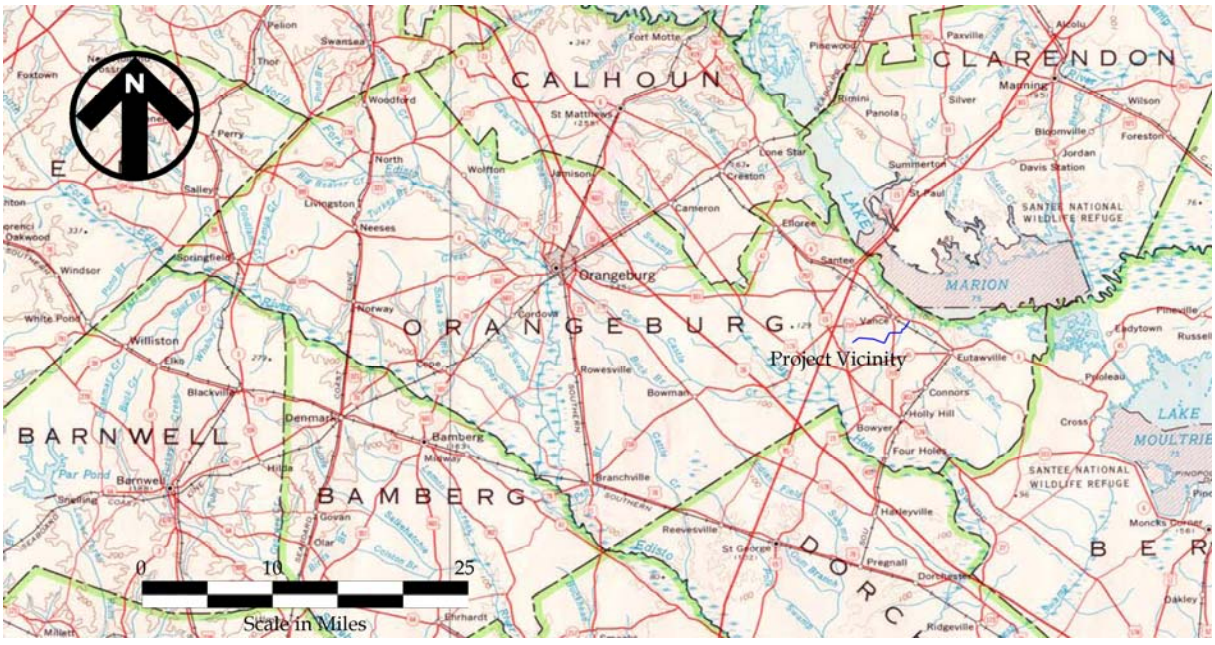

Figure 1. Project vicinity in Orangeburg County (basemap is USGS South Carolina 1:500,000).

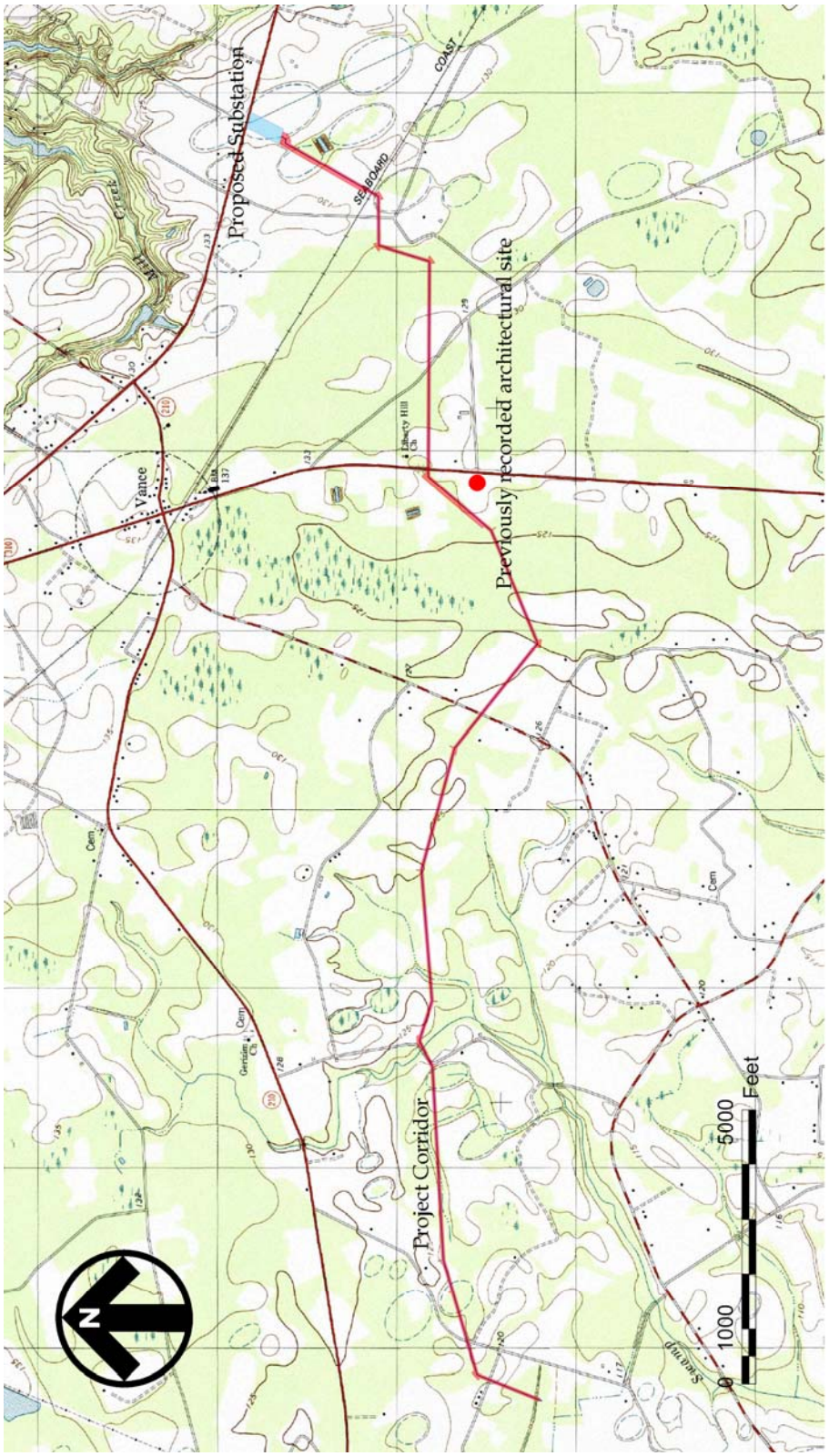

Figure 2. Project area and previously identified architectural site (basemap is USGS Vance 7.5').

this portion of Orangeburg County.

We were requested by Mr. Tommy L. Jackson of Central Electric Power Cooperative to conduct a cultural resources survey for the project on December 17, 2010.

These investigations incorporated a review of ArchSite to see if any previously identified architectural or archaeological resources were in the 0.5 mile APE. No site were found.

While no comprehensive architectural survey has been completed for Orangeburg County, several small surveys had been completed between 1973 and 1985. These surveys were examined for any possible resources in the project area. One sites, recorded as County #6, Vance Quad., was found in the 0.5 mile APE. It is a c. 1920 house. No determination of eligibility was made for the resource.

Archival and historical research was limited to a review of secondary sources available in the Chicora Foundation files.

The archaeological survey was conducted from March 31-April 6, 2011 by Ms. Nicole Southerland and Ms. Debi Hacker under the direction of Dr. Michael Trinkley.

The architectural survey of the APE, designed to identify any structures over 50 years in age that retain their integrity and were potentially eligible for the National Register of Historic Places, revealed two structures (0250-0251**)**. These included the previously identified structure, which was given an updated site number, and one additional recorded structure.

Report production was conducted at Chicora's laboratories in Columbia, South Carolina from April 7-19, 2011. Three forms for the identified archaeological sites (38OR321-323) have been filed at the S.C. Institute of Archaeology and Anthropology (SCIAA). The artifacts from the associated sites were recorded and discarded in the field. Three architectural forms for the recorded structures have been submitted to the State Historic Preservation Office (SHPO). The only photographic materials associated with this project are digital images, which are not archival and will be retained for 90 days.

NATURAL ENVIRONMENT

Physiography and Geology

The survey corridor, running east-west through Orangeburg County, is situated in the Middle Coastal Plain, south of the Fall Line. Elevations in the Middle Coastal Plain generally range from 220 to 350 feet above mean sea level (AMSL), with the topography being gently rolling. As Kovacik and Winberry (1987:20) observe, it can be very difficult to distinguish the Middle Coastal Plain from that of the Sand Hills to the north or even the lower Piedmont. You find the flatter, and almost featureless, Coastal Plain topography further to the south and southeast, south of the Citronelle Escarpment (Orangeburg Scarp).

The Carolina Sand Hills to the north are an area of discontinuous hilly topography characterized by rounded hills with gentle slopes, moderate relief, and sandy soils. Although technically part of the Coastal Plain geology, the Sand Hills are distinct geographically. Much of the sand was blown into dunes during the Miocene, although weathered clays and very old river deposits are also present. In many cases these sandy deposits lie directly on the crystalline rocks of the Piedmont (Kovacik and Winberry 1987; Murphy 1995).

Orangeburg is situated in the south-central part of South Carolina. It is bounded on the north by Calhoun and Clarendon counties. To the east is Berkeley County; while to the south is Dorchester. Bamberg and Barnwell counties are situated to the southwest and separated from Orangeburg by the South Fork of the Edisto River. Aiken and Lexington counties are on the northwest boundary. The county is still considered a rural area and about half of its 707,000 acres are still cropland, with much of the remainder being woodlands.

Figure 3. View of a mixed pine and hardwood forest in the project area.

Western Orangeburg County is drained primarily by the North and South Forks of the Edisto River, which joint together in the lower reaches of the county, about 3 miles west of Branchville. Eastern Orangeburg is drained by Four Hole Swamp and the Santee River. The latter was

dammed in the 1930s to create Lake Marion. The current trans-mission corridor runs through the eastern part of the County, encountering a small portion of Horse Range Swamp at the western end and stops just short of Lake Marion at the eastern terminus.

Table 1.
Soils along the corridor.

Soils on Corridor	Notes	% of Corridor	Group %
Very Poorly Drained Soils			**0.75%**
Byars loam		0.75%	
Poorly Drained Soils			**32.84%**
Coxville sandy loam		13.92%	
Elloree loamy sand	frequently flooded	6.92%	
Mouzon fine sandy loam	frequently flooded	3.92%	
Rains sandy loam		8.08%	
Somewhat Poorly Drained Soils			**4.17%**
Dunbar sandy loam		1.42%	
Lynchburg fine sandy loam		2.08%	
Ocilla loamy sand	0-2% slopes	0.67%	
Moderately Well Drained Soils			**53.33%**
Clarendon loamy sand	0-2% slopes	2.58%	
Duplin loamy sand	0-2% slopes	0.75%	
Goldsboro sandy loam	0-2% slopes	37.42%	
Noboco loamy sand	0-2% slopes	12.58%	
Well Drained Soils			**8.92%**
Dothan loamy sand	0-2% slopes	8.92%	

Mills comments on the numerous creeks and rivers of the Orangeburg District. He notes that many were navigable (Mills 1972 [1826]: 664-665) and the highest quality lands are situated along the Edisto. Since the area was subject to flooding, however, relatively little of the land was in active cultivation. He remarks that, "owing to their [floodplains] being so narrow, they would require expensive embankments, which would probably not be repaid in the value of the land thus reclaimed" (Mills 1972 [1826]:659).

Mills also comments that "Orangeburg lies within the alluvial region entirely; the upper edge just dipping into the primitive or granite region" (Mills 1972 [1826]:657). Today we recognize that this "upper region" lies in the northwestern corner of the county, which includes only the Upper Coastal Plain and a small portion of the Sand Hills – west of where this project is situated. We also recognize the complex geology of the Upper Coastal Plain where there are bedded sands overlaying kaolinitic clays and clayey, quartzose sands (Murphy 1995:93).

In this stone poor section of the state the nearest source of lithic materials for Native Americans would be the metamorphic and volcanic rocks of the Carolina Slate Belt, which outcrop to the north of the survey area in Anson County, North Carolina and west along the fall line in southeastern Lancaster, northern Chesterfield, and Kershaw counties in South Carolina. Far closer are occasional deposits or outcrops of cherts and orthoquartzites (see Anderson et al 1979:11-12 for additional information).

Soils

Mills commented that the Orangeburg district included a variety of soils. Most were described as having "a light, sandy nature, thin soil, but bottomed on clay" (Mills 1972 [1826]:658). This clay bottom helps minimize the droughty nature of the sandy soils, many of which are characterized as excessively well drained. Along the Congaree and Santee rivers he observed a very different soil, described as "a stiff, red clay" found on rolling hills – a description of a small area of the piedmont that is today part of Calhoun County to the north (but which was originally incorporated in Orangeburg District).

Figure 4. View of a cultivated field along the corridor.

The survey corridor crosses 13 soil series (DeFrancesco 1988). Table 1 briefly summarizes the soils by type and quantity found along the corridor.

About 62% of the transmission corridor is composed of moderately well drained to well drained soils. The remainder of the corridor, or 38%, ranges from somewhat poorly drained to very poorly drained soils.

Historically these sandy soils have been recognized to have low fertility. During the early nineteenth century, Mills commented that local farmers were beginning to more aggressively deal with the nutritional deficiencies of the soil:

> The planters now improve their lands by manuring the corn hills either with cotton seed or swamp mud, throwing up pens in the fall season, to remain during the winter. By mixing with it cotton seed, stable manure, or decayed vegetables, its fertilizing qualities are greatly increased (Mills 1972 [1826]:660).

Floristics

In the early nineteenth century Mills commented that the river lands – especially those adjacent to the Edisto – were dominated by "the magnolia, beech, willow, ash, elm, oak, birch, walnut, and hickory" while in the deeper swamp were "large groups of cypress, loblolly, bay, sweet bay, maple, tupelo, and poplar trees of an immense height and circum-ference" (Mills 1972 [1826]:658). In contrast, the uplands were dominated by pines.

Today there are two major categories of plant communities, based primarily on topographic location, which exist in the project area. The first category consists of upland vegetation. Supported here are a mixture of coniferous and deciduous forests dominated by pines and broadleaf taxa such as upland oaks, sweetgum, hickories, and various understory species. Incorporated may be small upland depressions and drainages, which contain more hydric species.

Portions of the upland area were found to contain pine forest, typically found on soils of low fertility, high acidity, and excessive drainage. Most often these areas have been subjected to extensive disturbance, including repeated logging operations, and the pine represent an early stage of revegetation. Several areas of hardwood forest exist in the project area, where oaks, maple, sweetgum, black gum, and mockernut hickory are prevalent. More common, however are mixed forests, containing both pines and hardwoods.

Lowland forests, which account for the second category, are located on the floodplains and swamps of the corridor. These floodplain soils are forested with bald cypress, gum, sycamore, water hickory, lowland oaks, soft maples, willows, and other herbaceous species (Kovacik and Winberry 1987:45).

The survey area, however, has been extensively altered by modern land-use activities. Many of the forests have been removed for cultivation and today about half of the project corridor is open and under cultivation.

Climate

This portion of South Carolina is dominated by the movement of systems across the country, but there are relatively few complete exchanges of air masses in the summer. This results in few breaks in the midsummer heat, with temperatures ranging from the high 80s to the low-90s. In contrast, winters are mild and relatively short. There are 45 inches of annual precipitation, with nearly 27 inches falling in the growing season (DeFrancesco 1988:2).

Like elsewhere in the state, Mills distinguished between the swamp lands and the sand lands in his assessment of Orangeburg's health:

> the sandhill section of this district presents as fine and healthy a climate as any country can boast of. Diseases are rare here . . . . Along the margins of the creeks and rivers, and within the influence of swamps, bays, and stagnant ponds, fevers and agues, bilious remittents, typhus, and other inflammatory diseases prevail (Mills 1972 [1826]:664).

PREHISTORIC AND HISTORIC SYNOPSIS

Previous Research

Orangeburg, for its size, has received relatively little attention. Derting et al. (1991) cite only 27 studies dealing with the county. Of these 13, or nearly half, are the result of road projects and an additional eight represent other forms of cultural resource studies, only three of which represent any significant aerial extent. The remaining six reports involve a variety of other research, with three specifically associated with work at the Alan Mack site (38OR67).

The Alan Mack site may be the best-known archaeological site in Orangeburg County. It attracted considerable attention in the early to mid-1980s, culminating in its nomination to the National Register of Historic Places. The site exhibits nearly 30 inches of stratified deposits running from at least the Early Archaic (characterized at the site by Palmer points). Above this are levels representing Kirk, Guilford, and Savannah River cultures. Above these are somewhat mixed deposits of Deptford and perhaps later pottery. Unfortunately, no publications are available for the site beyond a series of papers presented at the Archaeological Society of South Carolina Annual Conference and occasional reports in the society newsletter. Nevertheless, this site is very similar to the Cal Smoak site (38BM4) in nearby Bamberg County for which there is a very detailed report (Anderson et al. 1979).

More recently, several surveys have been performed near the project corridor. All are compliance projects and generally reveal few archaeological sites. These include two transmission line surveys (Trinkley and Southerland 2001 and 2006) and an intersection improvement project (Baluha and Wagoner 2010).

Prehistoric Overview

The Paleoindian period, lasting from 12,000 to 8,000 B.C., is evidenced by basally thinned, side-notched projectile points; fluted, lanceolate projectile points; side scrapers; end scrapers; and drills (Coe 1964; Michie 1977). The Paleoindian occupation, while widespread, does not appear to have been intensive. Points usually associated with this period include the Clovis and several variants, Suwannee, Simpson, and Dalton (Goodyear et al. 1989:36-38).

At least one Paleoindian point has been found in the Calhoun area, to the north of the current project area, reportedly from the Little Bull Swamp Creek drainage (Goodyear et al. 1989:33). This pattern of artifacts found along major river drainages has been interpreted by Michie to support the concept of an economy "oriented towards the exploitation of now extinct mega-fauna" (Michie 1977:124).

Unfortunately, little is known about Paleoindian subsistence strategies, settlement systems, or social organization. Generally, archaeologists agree that the Paleoindian groups were at a band level of society, were nomadic, and were both hunters and foragers. While population density, based on the isolated finds, is thought to have been low, Walthall suggests that toward the end of the period, "there was an increase in population density and in territoriality and that a number of new resource areas were beginning to be exploited" (Walthall 1980:30).

The Archaic period, which dates from 8000 to 1000 B.C., does not form a sharp break with the Paleo-Indian period, but is a slow transition characterized by a modern climate and an increase in the diversity of material culture. The chronology established by Coe (1964) for the

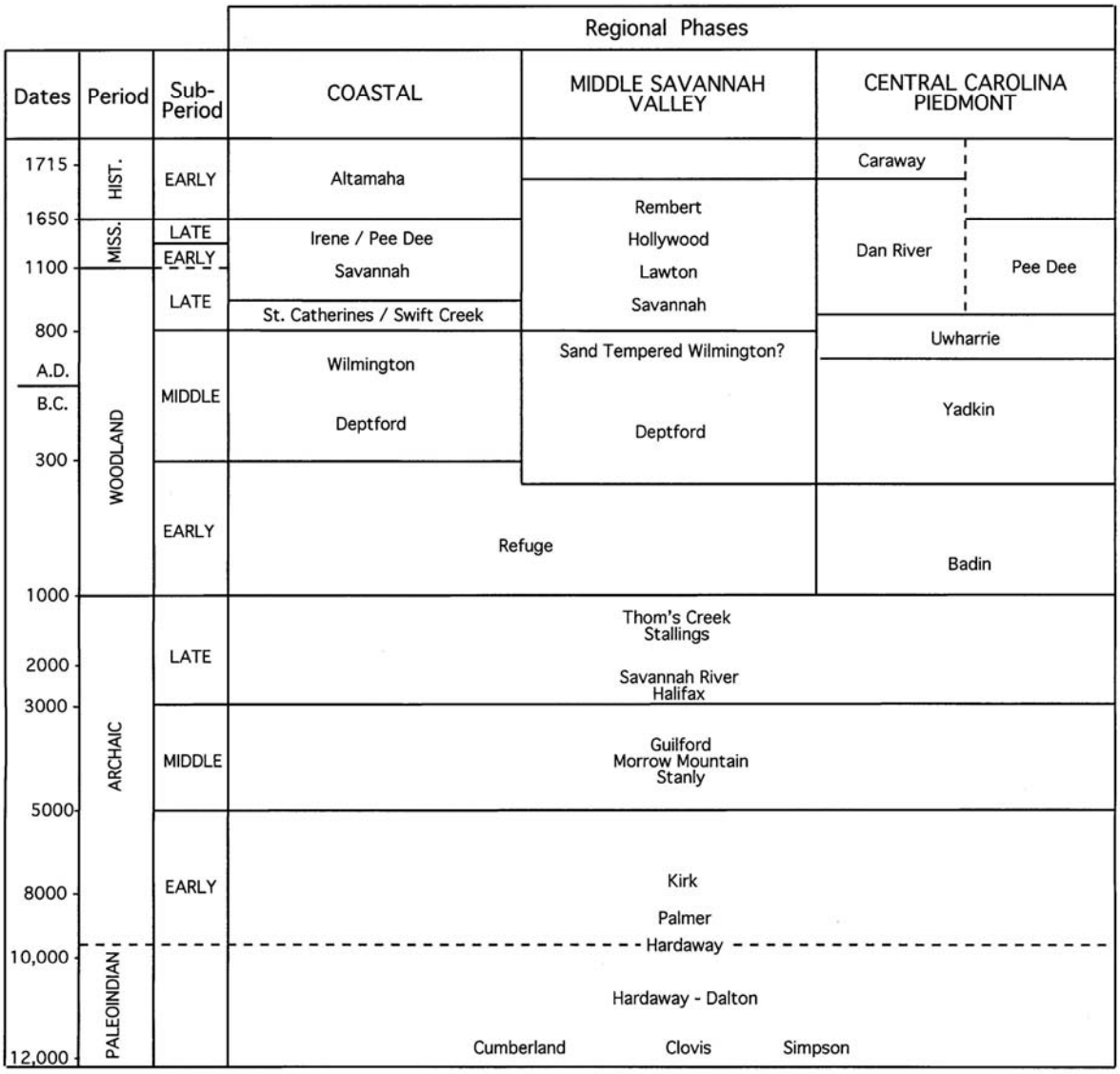

Figure 5. Generalized cultural sequence for South Carolina.

North Carolina Piedmont may be applied with little modification to the Orangeburg County area. Archaic period assemblages, characterized by corner-notched, side-notched, and broad stemmed projectile points, are common in the vicinity, although they rarely are found in good, well-preserved contexts.

The Woodland period begins, by definition, with the introduction of fired clay pottery about 2000 B.C. along the South Carolina coast, about 1000 B.C. in the Upper Coastal Plain, and much later in the Carolina Piedmont, perhaps 500 B.C. It should be noted that many researchers call the period from about 2500 to 1000 B.C. the Late Archaic because of a perceived continuation of the Archaic lifestyle in spite of the manufacture of pottery. Regardless of terminology, the period from 2000 to 500 B.C. was a period of tremendous change.

The subsistence economy during this early period was based primarily on deer hunting and fishing, with supplemental inclusions of small mammals, birds, reptiles, and shellfish. Various calculations of the probable yield of deer, fish, and other food sources identified from some coastal sites indicate that sedentary life was not only possible, but probable. Further inland it seems likely that many Native American groups continued the previous established patterns of band mobility. These frequent moves would allow the groups to take advantage of various seasonal resources, such as shad and sturgeon in the spring, nut masts in the fall, and turkeys during the winter.

The South Appalachian Mississippian period, from about A.D. 1100 to A.D. 1640 is the most elaborate level of culture attained by the native inhabitants and is followed by cultural disintegration brought about largely by European disease. The period is characterized by complicated stamped pottery, complex social organization, agriculture, and the construction of temple mounds and ceremonial centers. The earliest coastal phases are named the Savannah and Irene (known as Pee Dee further inland) (A.D. 1200 to 1550).

However little we know about the various small coastal tribes, considerably less is known about the protohistoric and historic tribes in the Upper Coastal Plain. Mooney (1894:80) devotes a modest two paragraphs to the Congaree and only slightly more to the Santee.

He notes that in 1701, Lawson found the Congaree "on the northeastern bank of the river below the junction of the Wateree" (Mooney 1894:80). In fact, Lawson's account (Lefler 1967:33-35) is the most detailed available for the tribe. He describes their town as consisting "not of above a dozen Houses, they having other straggling Plantations up and down the Country." He reported that they had lost much of their population to smallpox and other European diseases; in spite of this the Congarees were reported to be "kind and affable to the English, the Queen being very kind, giving us what rarities her Cabin afforded, as Loblolly [a thick gruel] made with Indian Corn, and dry'd Peaches" (Lefler 1967:35). Taukchiray suggests that this village was located on Pinetree Creek, although no archaeological effort has been made to locate the settlement (Hicks 1998:48).

Mooney reports that by 1715 their settlements had shifted to the south bank of the Congaree, perhaps on Big Beaver Creek (Mooney 1894:80). Taukchiray expands on this, suggesting "in 1712-1715, the Congaree lived on Congaree River -- first on the west side (now Calhoun County), then on the east side (now Richland County)" with some "on the north/northeastern side of upper Congaree River around Gills and Mill Creeks, on the outskirts of present-day Columbia" (Hicks 1998:50).

The 1715 Yemassee War further reduced their numbers and destabilized their society. Taukchiray suggests that they left their Congaree heartland in late 1716 and moved to the "northwest side of the Waccamaw River in what is now Horry County" (Hicks 1998:50). They stayed in this area until joining the Catawba about 1736. Although largely amalgamated by the Catawba, Taukchiray reports that at late as 1760 one of the Catawba headmen was known to the English as "Congaree Jimmy" (Hicks 1998:50).

For the Santee we know that Lawson found them in the vicinity of the Santee Indian mounds in 1701 (Lefler 1967:25-29; Mooney 1894:79). Again the tribe is reported to live in small hamlets, with Lawson remarking, "there being Plantations lying scattering here and there, for a great many Miles" (Lefler 1967:25). In fact, the settlements continued up river at least to Jacks Creek, and there were hunting camps at least as far up as the High Hills of Santee (Hicks 1998:30).

Mooney reports that just prior to the Yemassee War there were still two villages about 70 miles from Charleston and perhaps as many as 160 individuals (Mooney 1894:80). Taukchiray provides a little more detail, revealing that the

remains of the tribe were captured by the English and Etiwan Indians and transported to Charleston. There the men were shipped to the West Indies as slaves and the women and children were turned over the Etiwans as slaves (Hicks 1998:30), marking the end of the tribe.

Historic Synopsis

The earliest settlement in the area appears to have begun with the 1704 grant to Robert Sterling of 570 acres on Lyons Creek -- in what is today Calhoun County. Situated about 4 miles south of St. Matthews on the Charleston Road, this seems to have served as a focus for additional settlement, largely by English and French Huguenots, who came to the area between 1735 and 1737 (DeFrancesco 1988:1; Mills 1972 [1826]:656-657).

Settlement in the area was also spurred by the township plan of Governor Robert Johnson in the 1730s. The Amelia Township was situated on the west bank of the Congaree and Santee rivers, with the town site situated at the mouth of the Congaree. Settlement was particularly attracted to the areas of Buckhead, Lyons, and Halfway Swamp Creek (Smith 1977:9). It wasn't until the late 1740s that Amelia began to grow, but it quickly became a planters' parish and by 1757 the population had grown to 700 (Meriwether 1940:49-50). With the end of the Cherokee threat in 1761 the area attracted a second round of growth, with many small planters and farmers coming to the Wateree's west bank, below the shoals (Central Midlands Regional Planning Council 1974:142).

Further to the south, the Orangeburg Township was located on the east bank of the North Fork of the Edisto River, bordering Amelia to the north. The middle and upper sections, notably along the rivers, provided excellent agricultural land and this settlement attracted a variety of German and Swiss settlers. By 1740 the population had reached 500 (Meriwether 1940:45-46).

Originally part of Orangeburg District, the 1785 act divided the district into Lewisburg (along the river), Orange, Lexington (to the north), and Winton (an early version of Barnwell along the Savannah). These counties, however, were abolished in 1791 and the Orangeburg District was reinstituted. By 1804, however, the district was again subdivided, this time into Lexington (1804), Orangeburg, and Barnwell (1800). Consequently, by the time Mills discussed the region in 1820, Orangeburg was an elongated district and Mills observed that, "its figure is very irregular, having a kind of peninsula, or long narrow strip, running between two rivers, upwards of twenty-six miles from the main body of the district" (Mills 1972 [1826]:657).

During the Colonial period Orangeburg was at best a small village, containing several taverns and stores, a courthouse, a jail, both a Lutheran and an Anglican church, and a few small residences (Edgar 1998:163). The jail, built in 1770, was the one that General Sumter:

> besieged and took, during the revolutionary war. The British had a garrison there consisting of 70 militia and 12 regulars. This village was for some time the seat of war. After Lord Rawdon had retreated from Camden, he took up his quarters here, whither he was pursued by Gen. Green, who offering him battle; but his lordship, secure in his strong hold, would not venture out; and Gen. Green was too weak to attack him in his works, with any prospect of success (Mills 1972 [1826]:662-663).

It was also during this same campaign that General Green and his partisans attacked and took over Fort Motte (in what is today Calhoun County) (Edgar 1998:237).

By the second quarter of the nineteenth century, there were only three settlements in Orangeburg. The village of Orangeburg was "not

favorably situated for health" according to Mills, although it was "tolerably central to the district." The second was the village of Poplar Spring, about 4.5 miles west of Orangeburg and used primarily as a summer residence. The third settlement was the village of Totness, on the north side of High Hill Creek, about 3 miles from the Congaree River. It, too, was primarily a summer village for the planters, which Mills described as "pleasant . . . and much frequented" (Mills 1972 [1826]:663).

Between 1800 and 1820, the population of the Orangeburg District had increased by over a third, from 10,155 to 15,653. But the proportion of white increase was modest, from 5,957 in 1800 to 6,760 in 1820. The African American slave population, however, had more than doubled, from 4,110 to 8,829. This clearly documents the rise of plantations in the region, primarily along the rivers where the best lands were situated. Although Mills comments that there was a lively timber export trade from the district and that the German settlers "made a decent living" from growing corn, "cotton engrosses most attention" (Mills 1972 [1826]:660). It was certainly cotton that supported the increase in African American bondage in the region.

Mills' 1825 map of the Orangeburgh District (Figure 6) reveals that the proposed corridor is passing through areas with relatively little settlement. The eastern portion of the corridor crosses Wassamassaw and Gaillard roads and terminates near the Hacket Store and an unnamed settlement.

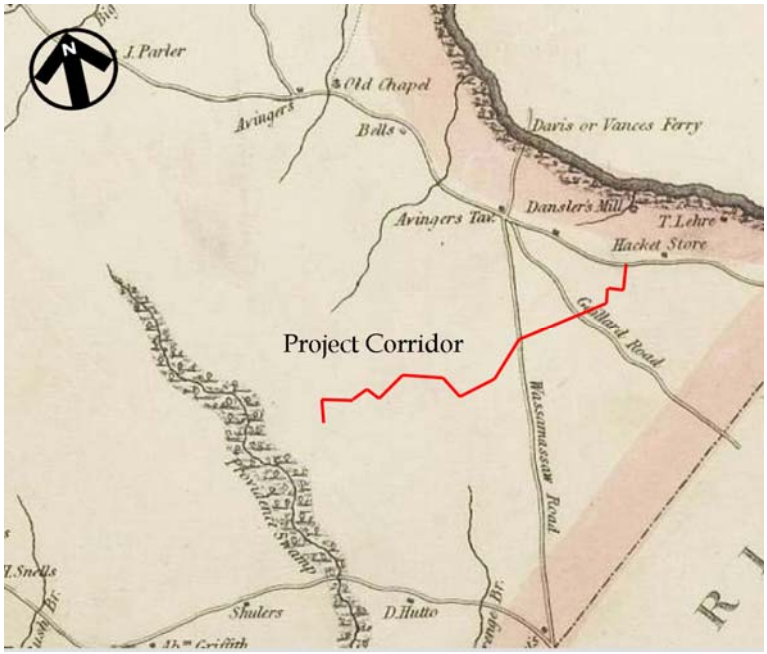

Figure 6. Portion of Mills' *Atlas* of Orangeburgh District showing the project corridor.

By 1850 the population had increased to 18,519, with 15,384 (83%) of these being African American slaves. Orangeburg had 1,206 farms, with an average of 150 improved acres. The district produced 614,418 bushels of Indian corn, ranking it 13th (out of 29). Also produced were 1,299,379 pounds of rice, ranking Orangeburg fifth in the state, behind fourth ranked Charleston with 16,906,273 pounds, but ahead of sixth ranked Anderson District (with 956,940 pounds). In spite of the slave population, Orangeburg District produced only 10,024 bales of cotton, ranking it thirteenth (DeBow 1854). Lawrence observed that while wheat was grown, it was affected by rust in the late antebellum and stopped being produced until rust-resistant varieties were introduced after the Civil War. He, too, reports that the region's attention was focused on cotton, which remained the area's primary crop until the mid-twentieth century when its prominence was shattered by soybeans (Lawrence 1963:128).

Orangeburg saw little impact from the Civil War until the end, when Sherman's troops came up the north side of the Edisto, followed the North Fork into the city of Orangeburg, which was burned, and then continued north into what is today Calhoun County, crossing over the Santee River (Glatthaar 1985).

After the Civil War, with slaves no longer

providing easy labor for the cotton plantations, the economy was stagnant and a slow period of rebuilding began. The remaining decades of the nineteenth century were focused on the dual goals of restoring the economy and ensuring that African Americans remained in a state as closely as possible resembling bondage.

The hiring of freedmen began immediately after the war, with variable results. The Freedmen's Bureau attempted to establish a system of wage labor, but the effort was largely tempered by the enactment of the Black Codes by the South Carolina Legislature in September 1865. These Codes allowed nominal freedom, while establishing a new kind of slavery, severely restricting the rights and freedoms of the black majority. Added to the Codes were oppressive contracts that reinforced the power of the plantation owner and degraded the freedom of the Blacks. Many white planters formed "Democratic Clubs," designed to counter the "radical" influence. Members of these clubs resolved not to hire "radicals," or blacks associated with radical politics.

While cash labor was initially used, gradually owners turned away from wage labor contracts, at least partially because of the scarcity of money, but also because of the prevailing belief among whites that blacks were so lazy that with money in their pockets they would not work. In its place two kinds of tenancy – sharecropping and renting -- developed. While very different, both succeeded in making land ownership very difficult, if not impossible, for the vast majority of Blacks.

Sharecropping required the tenant to pay his landlord part of the crop produced, while renting required that he pay a fixed rent in either crops or money. In sharecropping the tenant supplied the labor and one-half of the fertilizer, the landlord supplied everything else -- land, house, tools, work animals, animal feed, wood for fuel, and the other half of the needed fertilizer. In return, the landlord received half of the crop at harvest. This system became known as "working on halves," and the tenants as "half hands," or "half tenants."

In share-renting, the landlord supplied the land, housing, and either one-quarter or one-third of the fertilizer costs. The tenant supplied the labor, animals, animal feed, tools, seed, and the remainder of the fertilizer. At harvest, the crop was divided in proportion to the amount of fertilizer that each party supplied. A number of variations on this occurred, one of the most common being "third and fourth," where the landlord received one-fourth of the cotton crop and one-third of all other crops. In cash-renting the landlord provided the land and housing, with

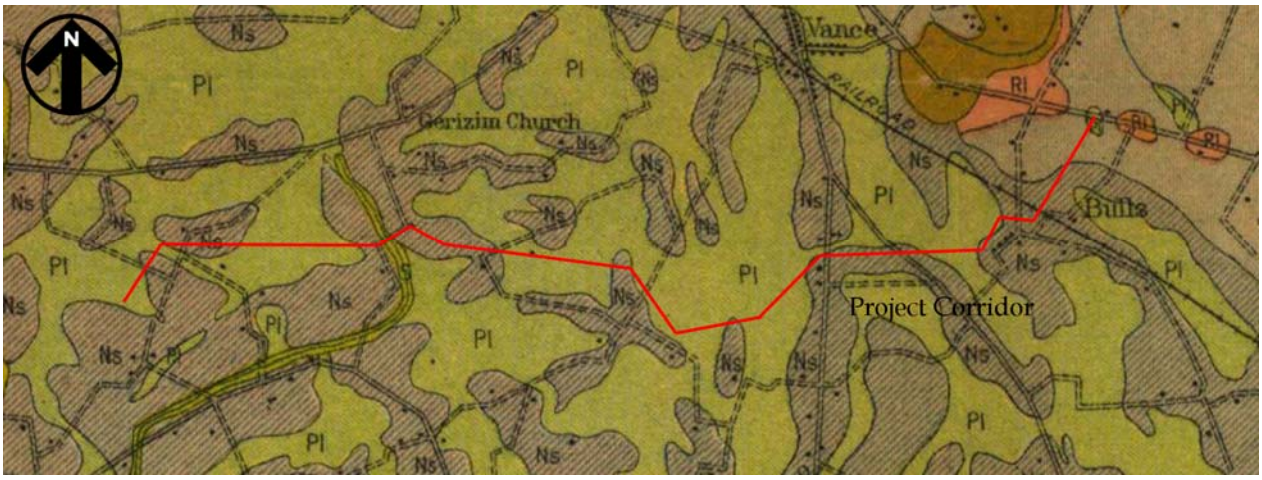

Figure 7. Portion of the 1913 Orangeburg County Soil Survey showing the project corridor.

the renter providing everything else and paying a fixed per-acre rent in cash.

An 1884 account of the county revealed that while there was only one textile mill (in the town of Orangeburg), there were 112 grist mills scattered across the countryside, along with 31 flour mills. All were using water power. As a vestige of the area's rice cultivation there was also one rice mill. Cash wages, when paid, were $4 to $6 a month, with rations, a house, and a small garden spot. The county had 322 cotton gins, each turning out about 4 bales a day. One of the most interesting observations was that South Carolina prohibition law was not observed and not enforced -- apparently liquor flowed freely in Orangeburg (Anonymous 1884).

By 1900, the population of Orangeburg County was 59,663, with African Americans still dominating the population (41,442 or nearly 70%). By this time tenancy had become firmly established -- there were 8,408 farms in the county, with an average size of just under 80 acres. Nearly 55% of the farms (n=4,613) were operated by cash tenants.

Nevertheless, Orangeburg recovered with a vengeance. By 1900, the county produced 1,172,520 bushels of corn, ranking it first in corn production. Its nearest competitor was Sumter with 762,120 bushels. Orangeburg also ranked first in cotton, producing 65,433 bales or 0.55 bale per acre (again its closest competitor was Sumter County, which produced 48,485 bales or 0.52 bale per acre). While a certain amount of Orangeburg's success was related to its size, it seems clear that the farms were generally profitably operated.

Calhoun County emerged in 1908, created from parts of Orangeburg and Lexington counties. It was small however, accounting for only 377 square miles. The population in 1910 was only 16,663. The 1913 soil survey for Orangeburg County shows at least 14 structures near the project corridor (Figure 7).

By 1920 there were 8,558 farms in Orangeburg County, most of which (n=4,037 or 47%) were between 20 and 49 acres in size. Two-thirds of those farms were operated by African Americans. Of the 8,558 farms, 5,644 (66%) were operated by tenants and 37% of these were share tenants, with an additional 25% being croppers.

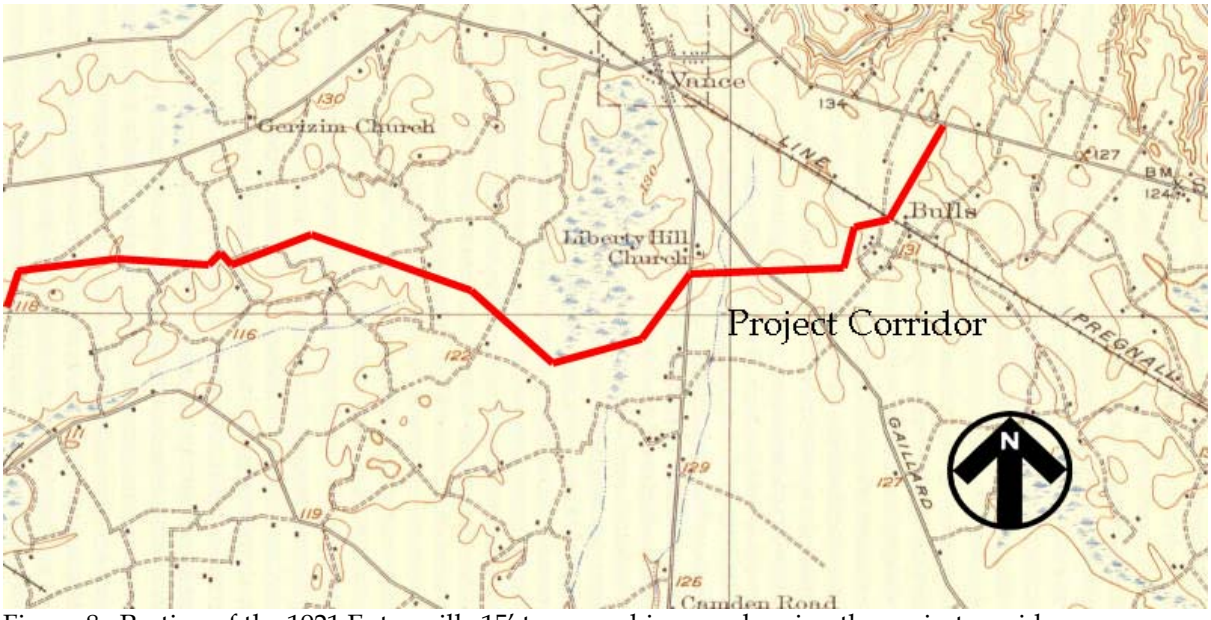

Figure 8. Portion of the 1921 Eutawville 15' topographic map showing the project corridor.

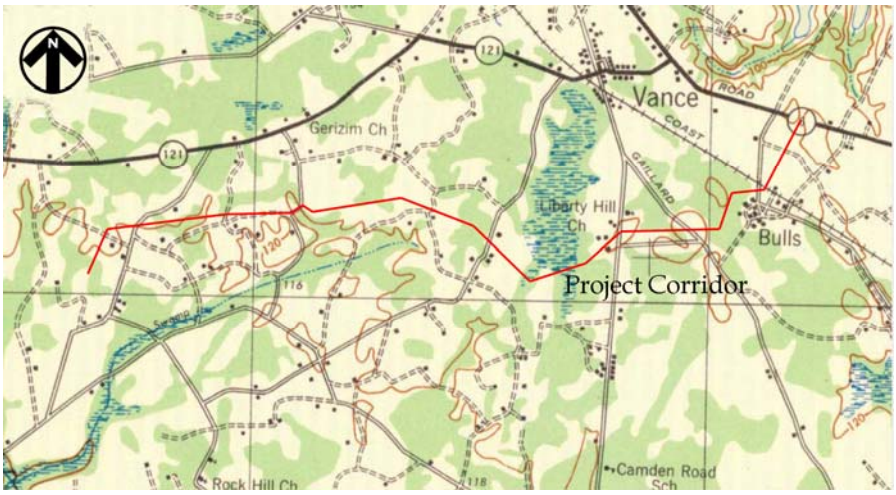

Figure 9. Portion of the 1943 Eutawville 15′ topographic map showing the project corridor.

Orangeburg County was dominated by an agriculture focused solely on cotton and designed to maximize profits to owners while minimizing any hope for small farmers -- black or white -- to ever own land. The 1921 Eutawville 15′ topographic map shows at least 19 structures in the vicinity of the corridor – more structures than the 1913 map (Figure 8).

The 1920s, however, were the beginning of the end for cotton. Cotton and tobacco prices both collapsed in 1920. This was followed by both droughts and the boll weevil. Edgar observes that in 1930, "after nearly a decade of difficulties, South Carolina agriculture was about to go under. Farmland and buildings had lost more than one-half of their value. One third of the state's farms were mortgaged, and 70 percent of the state's farmers survived on borrowed money" (Edgar 1998:485).

In 1930 over 68% of all farms were operated by tenants. Only a third of these were operated by cash tenants, with the bulk operated by other forms, primarily sharecropping. The mortgage problem was worse in Orangeburg than statewide -- fully two-fifths of the farms were mortgaged, with the average mortgage representing more than 40% of the farm's value.

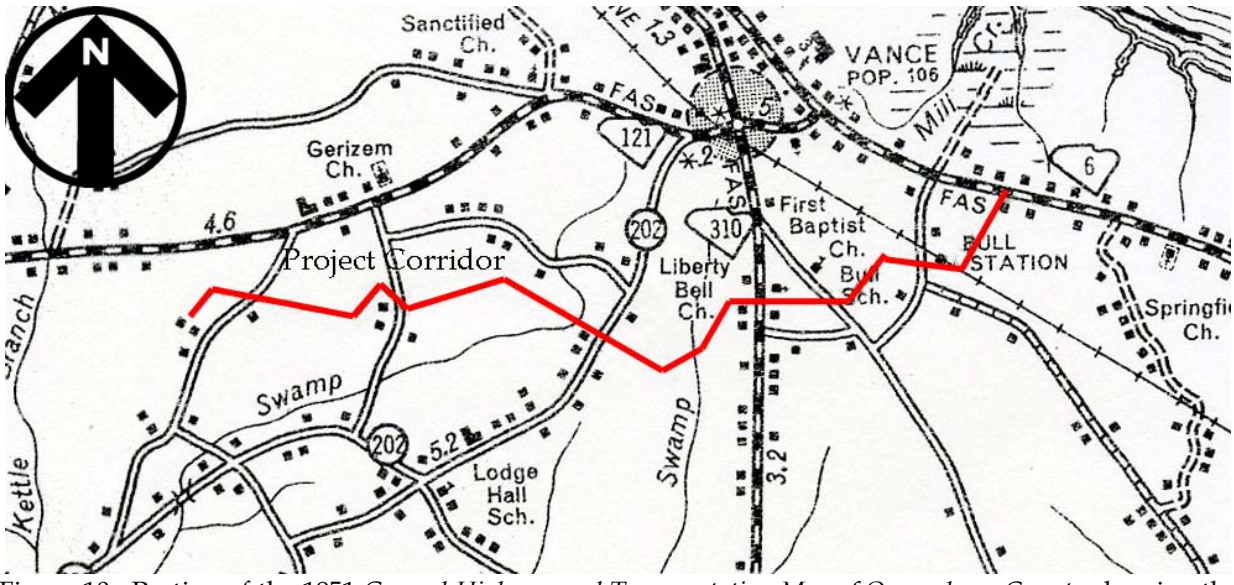

Figure 10. Portion of the 1951 *General Highway and Transportation Map of Orangeburg County* showing the project corridor.

Cotton production continued to fall, with only a brief upswing during the 1940s as a result of the war effort. A 1943 Eutawville 15′ topographic map shows the corridor with fewer structures than the 1921 map (Figure 9). Whether this is a result of failing farms or fewer subscribers is unclear.

While Orangeburg is still part of South Carolina's "cotton belt," production has declined by over 60% since 1949 and today less than 4% of the county's harvested land is devoted to cotton. Of far greater importance are soybeans, corn, wheat and specialty crops, such as cucumbers, watermelons, and cantaloupes (DeFrancesco 1988:2).

The 1951 *General Highway and Transportation Map of Orangeburg County* (Figure 10) shows the fewest structures of all the maps since 1913. Fewer overall farms and fewer subscribers are likely the causes of the population decrease.

METHODS

Archaeological Field Methods

The initially proposed field techniques involved the placement of shovel tests at 100-foot intervals along the center line of the corridor which has a 75-foot right-of-way. Two transects would be placed along Old #6 Highway for testing at the substation lot (Figure 11). Shovel tests would be implemented at 100-foot intervals to the southwest.

All soil would be screened through ¼-inch mesh. Each test would measure about 1 foot square and would normally be taken to a depth of at least 1.5 foot or until subsoil was encountered. All cultural remains would be collected, except for mortar and brick, which would be quantitatively noted in the field and discarded. Notes would be maintained for profiles at any sites encountered.

Should sites (defined by the presence of three or more artifacts from either surface survey or shovel tests within a 50 feet area) be identified, further tests would be used to obtain data on site boundaries, artifact quantity and diversity, site integrity, and temporal affiliation. These tests would be placed at 25 to 50 feet intervals in a simple cruciform pattern until two consecutive negative shovel tests were encountered. Since legal access is available only for the 75-foot project corridor, limited shovel tests are conducted off this corridor. The information required for completion of South Carolina Institute of Archaeology and Anthropology site forms would be collected and photographs would be taken, if warranted in the opinion of the field investigators.

These proposed techniques were implemented with no significant modifications. A total of 275 shovel tests were excavated along the corridor. A total of 14 additional shovel tests were excavated within the proposed substation lot. Additional tests were placed at the three identified archaeological sites.

The GPS positions were taken with a WAAS enabled Garmin 76 rover that tracks up to twelve satellites, each with a separate channel that is continuously being read. The benefit of parallel channel receivers is their improved sensitivity and ability to obtain and hold a satellite lock in difficult situations, such as in forests or urban environments where signal obstruction is a

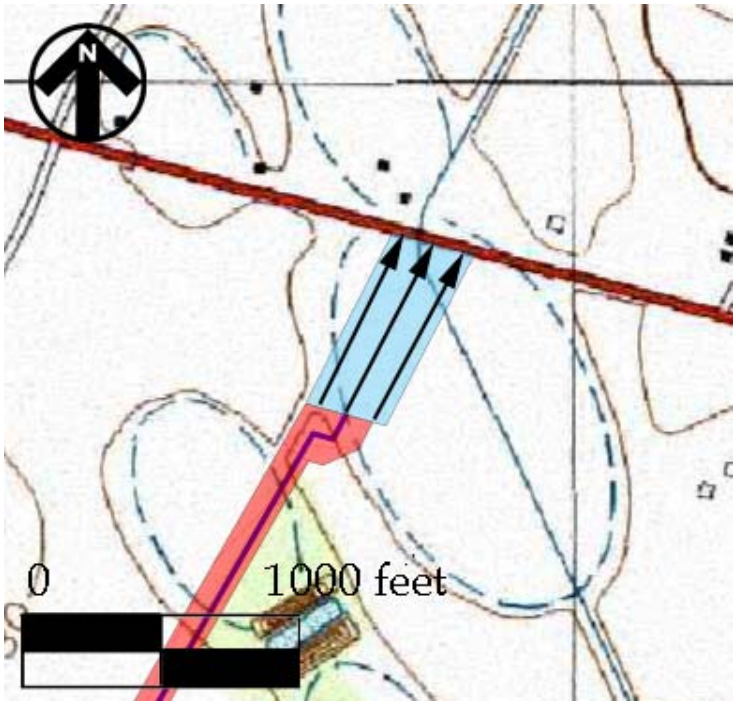

Figure 11. Proposed substation lot showing the placement of transects.

frequent problem. WAAS, or Wide Area Augmentation System, is a system of satellites and ground stations that provide GPS signal corrections, yielding higher position accuracy – generally an accuracy of 10 feet or better 95% of the time.

Figure 12. View of the existing transmission line at the western end of the corridor.

Architectural Survey

As previously discussed, we elected to use a 0.5 mile area of potential effect (APE). The architectural survey would record buildings, sites, structures, and objects which appeared to have been constructed before 1950 and might be considered potentially eligible for the National Register of Historic Places. Typical of such projects, this survey would record only those which has retained "some measure of its historic integrity" (Vivian n.d.:5) and which were visible from public roads.

For each identified resource we would complete a Statewide Survey Site Form and at least two representative photographs would be taken. Permanent control numbers would be assigned by the Survey Staff of the S.C. Department of Archives and History at the conclusion of the study. The Site Forms for the resources identified during this study would be submitted to the S.C. Department of Archives and History.

Site Evaluation

Archaeological sites will be evaluated for further work based on the eligibility criteria for the National Register of Historic Places. Chicora Foundation only provides an opinion of National Register eligibility and the final determination is made by the lead federal agency, in consultation with the State Historic Preservation Officer at the South Carolina Department of Archives and History.

The criteria for eligibility to the National Register of Historic Places is described by 36CFR60.4, which states:

> the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and
>
> a. that are associated with events that have made a significant contribution to the broad patterns of our history; or

> b. that are associated with the lives of persons significant in our past; or
>
> c. that embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
>
> d. that have yielded, or may be likely to yield, information important in prehistory or history.

National Register Bulletin 36 (Townsend et al. 1993) provides an evaluative process that contains five steps for forming a clearly defined explicit rationale for either the site's eligibility or lack of eligibility. Briefly, these steps are:

> ▪ identification of the site's data sets or categories of archaeological information such as ceramics, lithics, subsistence remains, architectural remains, or sub-surface features;
>
> ▪ identification of the historic context applicable to the site, providing a framework for the evaluative process;
>
> ▪ identification of the important research questions the site might be able to address, given the data sets and the context;
>
> ▪ evaluation of the site's archaeological integrity to ensure that the data sets were sufficiently well preserved to address the research questions; and
>
> ▪ identification of important research questions among all of those which might be asked and answered at the site.

This approach, of course, has been developed for use documenting eligibility of sites being actually nominated to the National Register of Historic Places where the evaluative process must stand alone, with relatively little reference to other documentation and where typically only one site is being considered. As a result, some aspects of the evaluative process have been summarized, but we have tried to focus on an archaeological site's ability to address significant research topics within the context of its available data sets.

For architectural sites the evaluative process was somewhat different. Given the relatively limited architectural data available for most of the properties, we focus on evaluating these sites using National Register Criterion C, looking at the site's "distinctive characteristics." Key to this concept is the issue of integrity. This means that the property needs to have retained, essentially intact, its physical identity from the historic period.

Particular attention would be given to the integrity of design, workmanship, and materials. Design includes the organization of space, proportion, scale, technology, ornamentation, and materials. As *National Register Bulletin* 36 observes, "Recognizability of a property, or the ability of a property to convey its significance, depends largely upon the degree to which the design of the property is intact" (Townsend et al. 1993:18). Workmanship is evidence of the artisan's labor and skill and can apply to either the entire property or to specific features of the property. Finally, materials -- the physical items used on and in the property -- are "of paramount importance under Criterion C" (Townsend et al. 1993:19). Integrity here is reflected by maintenance of the original material and avoidance of replacement materials.

Laboratory Analysis

The artifacts from the three identified archaeological sites were recorded and discarded in the field; therefore, no curation was needed. The site forms for the identified archaeological sites have been filed with the South Carolina Institute of Archaeology and Anthropology.

Analysis of collections followed professionally accepted standard with a level of intensity suitable to the quantity and quality of the remains. In general, the temporal, cultural, and typological classifications of historic remains follow such authors as Price (1979) and South (1977).

RESULTS OF SURVEY

Introduction

As a result of this cultural resources survey three archaeological sites (38OR321 - 38OR323) were recorded (Figure 13). All three sites are nineteenth to twentieth century scatters and are recommended not eligible for the National Register of Historic Places because of their inability to address significant research questions.

No comprehensive architectural survey has been performed for Orangeburg County. This project only recorded historic structures that were within 0.5 mile of the proposed corridor and showed enough integrity to be potentially eligible for the National Register of Historic Places. As a result, two sites (0250-0251) were recorded (Figure 13). The first structure, 0250 -- a c. 1920 house, was recorded in 1980 by the State Historic Preservation Office during a brief survey. The current survey gave this site an updated architectural number. The second site, 0251 – a c. 1840 house, is newly recorded. Both structures are potentially eligible for the National Register of Historic Places, but should not be affected by the proposed transmission corridor.

Archaeological Resources

38OR321

Location: Zone 17; 555126E 3698008N (NAD27 datum)
Elevation: 130 feet AMSL
Component: 19th-20th century scatter
Size: 75 feet x 75 feet
Nearest water source: Mill Creek about 4,600 feet to the north
Previous disturbance: Area has been logged; no remnant above grade architectural features found
Landform location: Plain
Vegetation: Mixed pine and hardwood forest

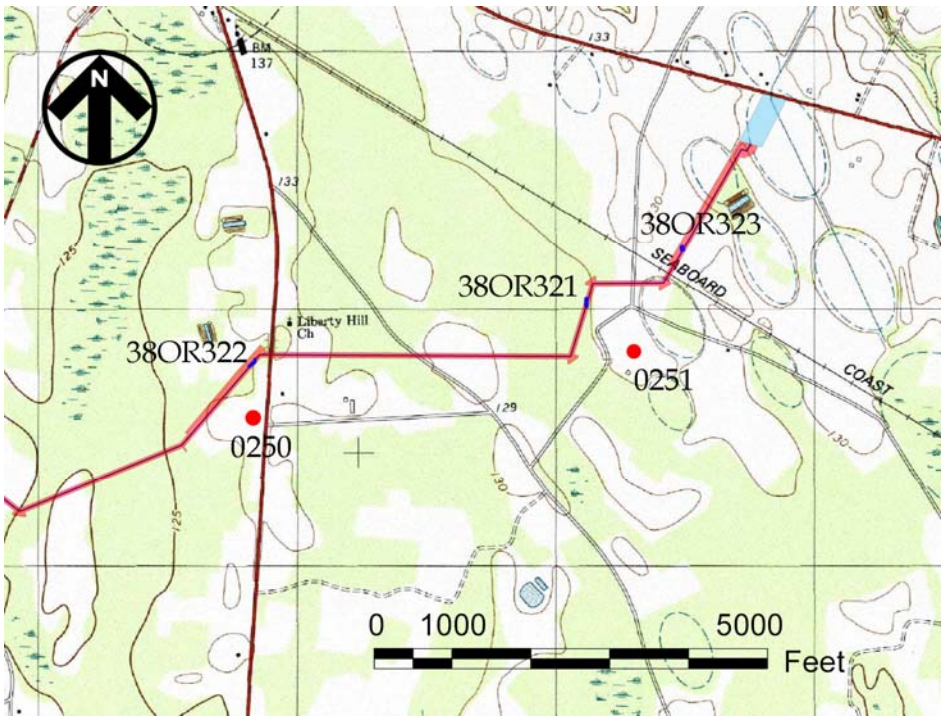

Figure 13. Topographic map showing the identified archaeological and architectural sites.

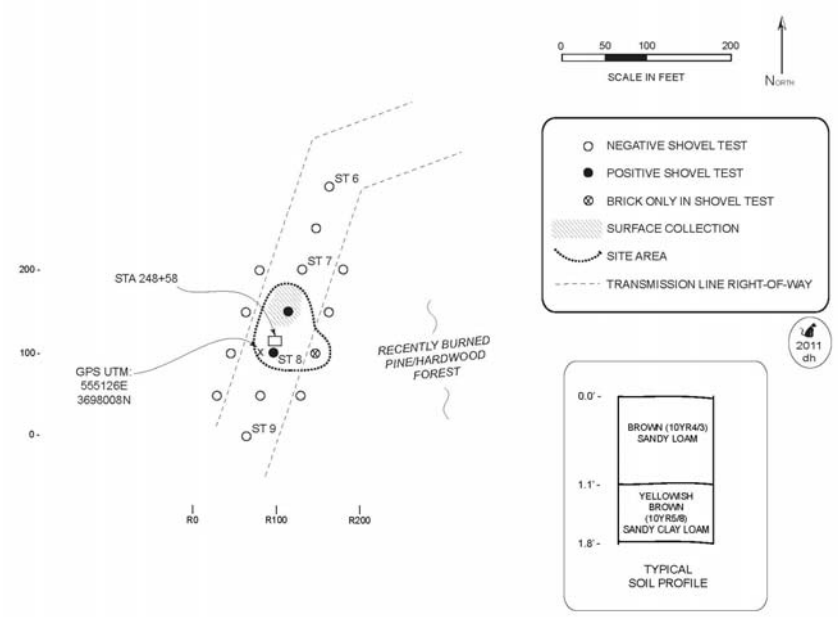

Figure 14. Sketch map and soil profile for 38OR321.

Site Description

Site 38OR321 is located about 600 feet west of Dukenfield Drive, about 400 feet south of its junction with the Seaboard Coast Line Railroad (see Figure 13). It contains a sparse nineteenth to twentieth century scatter. The site is located on a plain that has been damaged from logging. While possibly representing a tenant structure, there are no above grade architectural features, such as a chimney footing or foundation remains.

Investigation Methods

The site was originally identified when shovel testing at 100-foot intervals produced a positive (ST 8 or 100R100). Additional shovel testing at 50-foot intervals was assumed along the corridor, which ran approximately NNE by SSW. This produced one additional positive shovel test (150R115). Additional testing was done to the east and west of each of the two positives, however, with the right-of-way of the corridor only 75 feet, only one shovel test was performed (instead of obtaining at least two negatives), since the test was located outside the project area. One additional shovel test was positive (100R150), producing a small brick fragment. A total of 15 shovel tests were performed in the site area with three (20%) positive (Figure 14).

Shovel tests produced Dothan soils that have an Ap horizon of brown (10YR4/3) sandy loam to 1.1 feet in depth over a yellowish brown (10YR5/8) sandy clay loam extending to 1.8 feet in depth. Artifacts were found in the upper 0.5 foot of soil.

Table 2.
Artifacts from 38OR321

	100R100	100R150	150R115	Surface	**Total**
Kitchen Group					**20**
Whiteware, undecorated	1		2	2	
Glass, manganese	3		4	2	
Glass, clear			5	1	
Architecture Group					**1**
Brick		1			
Unknown Group					**1**
UID iron fragment				1	
TOTAL					**22**

Artifacts

A total of 22 artifacts were recorded

from the site (Table 2). As previously mentioned, the diagnostic artifacts date from the nineteenth to the twentieth centuries. For example, undecorated whiteware was produced from 1813 to 1900 and used well into the twentieth century. Manganese glass was common starting in the late nineteenth century through the first quarter of the twentieth century (Jones and Sullivan 1985:13).

The clear glass and unidentifiable iron fragment are not diagnostic.

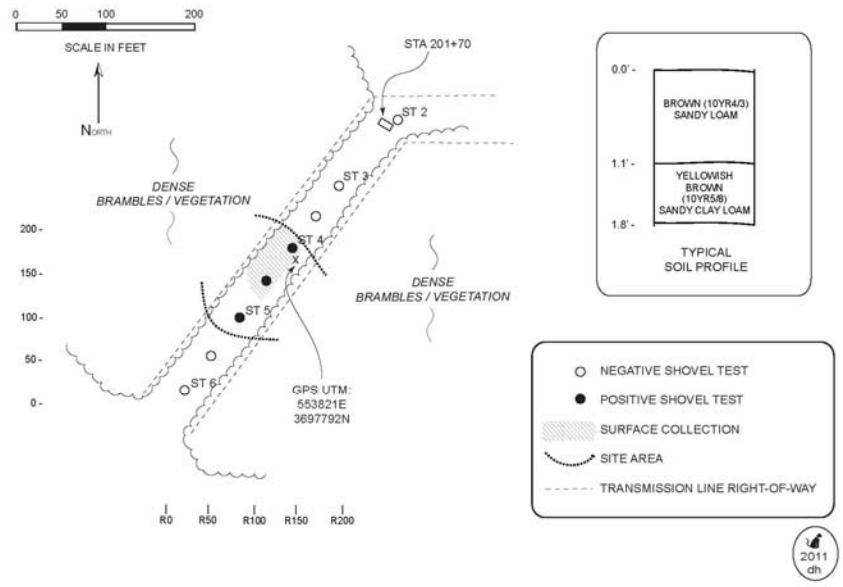

Figure 15. Sketch map and soil profile for 38OR322.

38OR322

Location: Zone 17; 553821E 3697792N (NAD27 datum)
Elevation: 130 feet AMSL
Component: 19th-20th century scatter
Size: 100 feet x 50 feet
Nearest water source: Mill Creek, about 6,000 feet to the northeast
Previous disturbance: Area has been logged; no remnant above-grade architectural features found
Landform location: Plain
Vegetation: Mixed pine and hardwood forest

Site Description

Site 38OR322 is located about 400 feet west of Camden Road (SC 310), about 1,000 feet north of its intersection with Wabash Road (see Figure 13). The site contains a sparse scatter of nineteenth to twentieth century artifacts.

Investigation Methods

The site was originally identified through shovel testing at 100-foot intervals along the corridor. What was recorded as shovel test 4 (170R140) was positive. Shovel testing was

Summary and NRHP Evaluation

Evaluation of this site's potential for listing on the National Register of Historic Places should be based on factors such as archaeological site integrity, data sets present, and potential to contribute meaningful research. This site produced relatively few artifacts – mostly kitchen related. While it is possible that the site extends outside the project area, the limited testing just outside the corridor produced few additional artifacts and no surface artifacts. Given the limited information, it is unlikely that this site will produce the data sets necessary to address significant research questions about turn-of-the-century tenant life in Orangeburg County.

This site is recommended not eligible for inclusion on the National Register of Historic Places. No additional management activity is recommended pending the review and concurrence by the State Historic Preservation Office.

Table 3.
Artifacts for 38OR322

	90R80	130R110	170R140	Surface	Total
Kitchen Group					**18**
Whiteware, undecorated			1		
Pearlware, undecorated				1	
Porcelain, white		1			
Glass, clear	2	2	3	1	
Glass, green	1				
Glass, aqua	1				
Glass, cobalt		1			
Porcelain cap liner			1		
Aluminum jar lid				1	
Tin can fragment		2			
Architecture Group					**2**
UID nail		1			
Brick			1		
TOTAL					**20**

performed at 50-foot intervals along the project corridor, which ran approximately NE by SW, until two consecutive negative shovel tests were encountered. Shovel testing was not performed outside the corridor. A total of seven shovel tests were excavated with three (43%) positive (Figure 15).

Shovel tests produced Dothan soils that have an Ap horizon of brown (10YR4/3) sandy loam to 1.1 feet in depth over a yellowish brown (10YR5/8) sandy clay loam extending to 1.8 feet in depth. Artifacts were found in the upper 0.5 foot of soil.

Artifacts

Table 3 summarizes the artifacts recorded at the site. As previously mentioned, the site dates from the nineteenth to the twentieth century. The only diagnostic artifacts are the two pieces of ceramics. Undecorated whiteware was produced from 1813 to 1900 and later while the pearlware has a mean ceramic date of 1805. A clear soda bottle neck with a screw top was found that is from the twentieth century.

Summary and NRHP Evaluation

Evaluation of this site's potential for listing on the National Register of Historic Places should be based on factors such as archaeological site integrity, data sets present, and potential to contribute meaningful research. This site overwhelmingly produced kitchen artifacts and while the site may produce more artifacts beyond the corridor, the portion of the site within the project area failed to produce the quantity or quality of artifacts needed to address significant research questions about tenant life in Orangeburg County.

This site is recommended not eligible for inclusion on the National Register of Historic Places. No additional management activity is recommended pending the review and concurrence by the State Historic Preservation Office.

38OR323

Location: Zone 17; 555486E 3698259N (NAD27 datum)
Elevation: 125 feet AMSL
Component: 19th-20th century scatter
Size: 75 feet x 50 feet
Nearest water source: Mill Creek, about 4,000 feet to the north
Previous disturbance: Area has been logged and cultivated
Landform location: Plain
Vegetation: Vineyard

Site Description

Site 38OR323 is located about 600 feet east of Dukenfield Drive, about 2,000 feet south of its intersection with Old #6 Highway (SC 6) (see Figure 13). The site contains a sparse scatter of nineteenth to twentieth century artifacts.

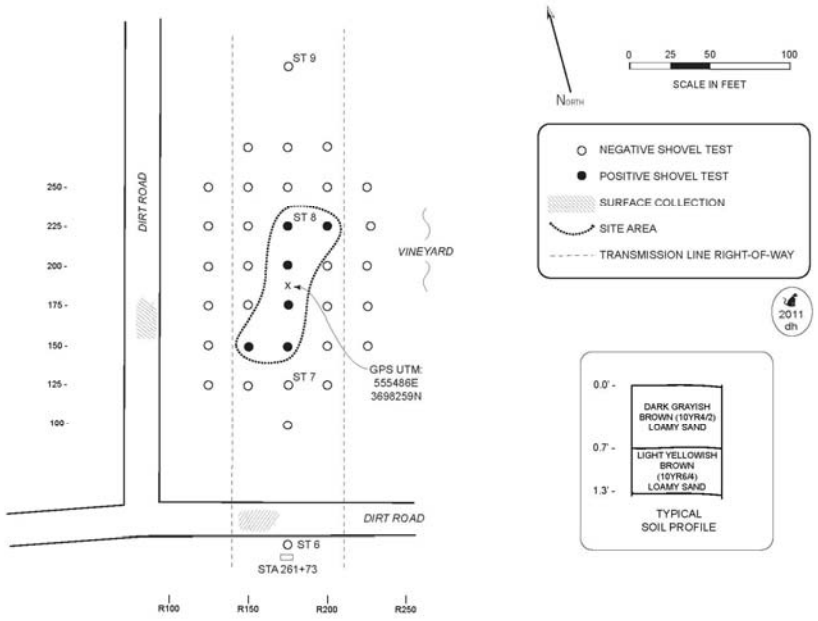

Figure 16. Sketch map and soil profile for 38OR323.

Investigation Methods

The site was originally identified through shovel testing at 100-foot intervals along the corridor. What was recorded as shovel test 8 (225R175) was positive. Shovel testing was performed at 25-foot intervals, since the site was producing sparse numbers of artifacts, along the project corridor, which ran approximately NE by SW, and in the cardinal directions until two consecutive negative shovel tests were encountered. A total of 34 shovel tests were excavated with six (18%) positive (Figure 16).

Shovel tests produced Clarendon soils that have an Ap horizon of dark grayish brown (10YR4/2) loamy sand to 0.7 foot in depth over a light yellowish brown (10YR6/4) loamy sand extending to 1.3 feet in depth.

Artifacts

Table 4 summarizes the artifacts recorded at the site. As previously mentioned, the site dates from the nineteenth to the twentieth centuries. Whiteware has a mean ceramic date of 1860, while annular whiteware has a mean ceramic date of 1866. Undecorated pearlware has an earlier mean ceramic date of 1805.

Table 4.
Artifacts from 38OR323

	150R150	150R175	175R175	200R175	225R175	225R200	Surface	**Total**
Kitchen Group								**14**
Whiteware, undecorated		1			1	1	1	
Whiteware, annular						1	1	
Pearlware, undecorated			1					
Porcelain, white							2	
Glass, clear		1			2			
Glass, light green		1						
Glass, manganese	1							
Architecture Group								**1**
UID nail fragment				1				
TOTAL								**15**

Summary and NRHP Evaluation

Evaluation of this site's potential for listing on the National Register of Historic Places should be based on factors such as archaeological site integrity, data sets present, and potential to contribute meaningful research. This site failed to produce the data sets and the quantity or quality of artifacts needed to address significant research questions about tenant life in Orangeburg County.

Figure 17. View of 0250.

This site is recommended not eligible for inclusion on the National Register of Historic Places. No additional management activity is recommended pending the review and concurrence by the State Historic Preservation Office.

Figure 18. View of 0250 from the project corridor.

Architectural Resources

As previously mentioned, two structures (0250-0251) that appear to have enough integrity to be potentially eligible for the National Register of Historic Places were recorded during this project. One of the structures, 0250, was recorded in 1980 as part of a brief SHPO survey of the county. Additional photos were taken of this structure and an updated site number was assigned.

Structure 0250, originally recorded as County #6, Vance Quad, by the 1980

SHPO survey, is a c. 1920 house (Figure 17). The two story house has a brick veneer and three interior chimneys. The bellcast hip roof is tiled and a hipped porch covers the one story front façade of the structure. An aluminum porch has been added to the second story left elevation. Since the 1980 survey, the tile on the front porch has been replaced with tin.

Figure 19. View of 0251.

The proposed corridor is about 500 feet from this house at the closest point. The very top of the structure can be seen from the project corridor (Figure 18), but the rest of the house, including all the windows, is shielded from the corridor by trees. From the house, looking northwest toward the project area, the corridor is completely shielded by trees. An existing transmission line is in the front yard of this structure. The proposed transmission line will not be visually intrusive to this historic property.

The second structure, 0251, is a c. 1840 house (Figure 19). The two story house has two exterior corbelled chimneys and a gable roof of tin. The decorative posts on the porch appear to be a more recent addition as is a rear addition. The property contains a tenant house and other sheds (Figure 20).

Figure 20. View of the tenant house and sheds from 0251.

The house is about 800 feet from the proposed transmission corridor. The house is slightly visible from the corridor (Figure 21), but numerous trees will help shield the proposed transmission line from the structure.

Figure 21. View of 0251 from the project corridor.

CONCLUSIONS

This study involved the examination of a 5.1 mile corridor for a transmission line and lot for a substation in Orangeburg County. This work, conducted for Mr. Tommy L. Jackson of Central Electric Power Cooperative examined archaeological sites and cultural resources found on the proposed project area and is intended to assist this company in complying with their historic preservation responsibilities.

As a result of this investigation, three archaeological sites (38OR321-323) were found in the survey area. All represent nineteenth to twentieth century scatters and are recommended not eligible for the National Register of Historic Places.

A survey of public roads within 0.5 mile revealed two structures (0250 and 0251) that retain the integrity for the National Register of Historic Places. 0250 is a c. 1920 house and 0251 is a c. 1840 house. While both of these structures are potentially eligible for the National Register of Historic Places, the proposed transmission line is not anticipated to cause visual intrusion to the properties.

It is possible that archaeological remains may be encountered during construction activities. As always, contractors should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office, or Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No further land altering activities should take place in the vicinity of these discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).

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